

THE IMPACT OF NEW LEASE STANDARDS UNDER US GAAP AND IFRS ON FINANCIAL RATIOS

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CASE DESCRIPTION

Most of the world financial market economies have adopted International Reporting Standards (IFRS) as the necessary framework for financial statements. In the United States, Generally Accepted Accounting Principles (GAAP) is still required, but the adoption of IFRS has the support of many accounting firms and professional organizations and is under consideration by the SEC. The revised lease guidelines under GAAP and IFRS shows a similar effect on the financial ratios and eliminate off-balance sheet financing. This case study illustrates the differences in the treatment of leases and the impact of these differences on financial statements and selected financial ratios after the year 2019. In a given situation, students use GAAP financial statements and prepare an IFRS based balance sheet, cash flow statement, and income statement. It is necessary to understand both the revised GAAP and IFRS rules regarding leases to address our case study. Our case study is designed to be used at undergraduate and graduate levels and courses like Intermediate Accounting, Accounting Theory, Analysis of Financial Statements. The instructor/s can offer our case study as an individual case study or as a group project

JEL: M4, M41, M42, M48, M49

KEYWORDS: US GAAP, IFRS, Right-of-use Asset, Capital Lease, Operating Lease, Financial Ratios

INTRODUCTION

Thomas, Peter, and Michelle, (2016) in a case study, illustrated the treatment of lease under the GAAP and IFRS and their impact on the financial ratios. They demonstrated that under IFRS, the financial statement ratios had a more negative impact on bond covenant agreements as well as other liabilities. Our case study illustrates the GAAP and IFRS treatment of leases and the impact on financial ratios under the revised lease rules Accounting Standards Update (ASC) 842 and IFRS 16. The Financial Accounting Standards Board (from now on FASB) is amending the FASB Accounting Standards Codification and creating Accounting Standards Update(ASC) 842, Leases. This Update, along with IFRS 16, Leases, is the results of the FASB's and the International Accounting Standards Board's (IASB's) efforts to meet that objective and improve financial reporting (FASB Accounting Standards Update 2016). The updates are effective for fiscal years beginning after December 15, 2018, including interim periods for the following entities:

- (a) public business entity,
- (b) a not for profit entity that has issued or is a conduit bond obligor for, securities that are traded, listed, or quoted on an exchange or an over-the-counter market, and
- (c) An employee benefit plan that files financial statements with the U.S. Securities and Exchange Commission (SEC). For other entities, amendments are effective for fiscal years beginning after December

15, 2019, and interim periods within fiscal years beginning after December 15, 2020. The FASB allows the early application of the amendments for all entities (FASB ASC 2016_02 Section A). “ASC 842 requires businesses to recognize most leases on their balance sheet—essentially all contracts that meet the definition of a lease, including operating leases, will be recognized on balance sheets via a right-of-use (ROU) asset and a lease liability. The right-of-use asset is a lessee's right to use an over the life of a lease. If a right-of-use asset is determined to be impaired, the impairment is immediately recorded, thereby reducing the carrying amount of the asset” (FASB 2016).

“ASC 842 signifies a substantial revamp of the accounting treatment for leases, with the most significant change being that most leases, including most operating leases, will now be capitalized on the balance sheet. Under ASC 840, FASB permitted operating leases to be reported only in the footnotes of corporate financial statements. Under ASC 842, the only leases that are exempt from the capitalization requirement are short-term leases less than or equal to 12 months in length” (ASC 842 Review 2018).

Another important update is the Type A and Type B leases. The “level of consumption” is the determining factor. “Type A lease is one where a more than an insignificant amount of the value of the leased asset is used up during the lease period. Most leases other than property, such as equipment and vehicles, fall into this category. Type A lessees would recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments and recognize the unwinding of the discount on the lease liability as interest separately from the amortization of the right-of-use asset” (Lease Query 2016).

“In Type B leases, an insignificant portion of the leased asset is consumed during the lease period. Most real estate leases fit into this category. Type B lessees would recognize a right-of-use asset and a lease liability initially measured at the present value of the lease payments and would recognize a single lease cost on a straight-line basis, combining the unwinding of the discount on the lease liability with the amortization of the right-of-use asset” (FASB 2016).

It is to be duly noted that ASC 842 differs from International Financial Reporting Standards (from now on IFRS) 16 in certain aspects of the lessee accounting model. ASC 842 makes a distinction between finance and operating leases in the financial statements in the lessee accounting model, whereas IFRS 16 requires all leases to be accounted for consistent with ASC 842 approach for finance leases. As a result, operating leases under ASC 842 will be considered differently from IFRS, and that will show a different effect on the statement of comprehensive income and the statement of cash flows than previous IFRSs. This case study explores the impact of ASC 842 (FASB Accounting Standards Update 2016) and the IFRS 16 changes that come into force from Jan 1, 2019.

A global lease capitalization study by Price Waterhouse Coopers (PwC) shows an increase in median debt and Earnings before interest, tax, depreciation, and amortization (EBITDA) for most of the industries (IFRS -16).

CASE INFORMATION

ACE Corporation (ACE), a publicly traded NASDAQ company (symbol ACE), is a manufacturer of electrical automobiles. It is based in Detroit, Michigan and the company has been operating since 1996. The company sells its electrical automobiles to auto manufacturers as well as the retail market on a worldwide basis. Its major clients are Ford, General Motors, and Toyota. ACE has captured about 10 percent of the world market of electrical automobile sales. Its stock sells at 25 U.S. Dollars per share, and its 52-week price range is between 19.75 and 27.15 U.S. Dollars, with a market cap of 10.6 billion dollars.

Their financial statements presented below for the year ending December 31, 2019, has been prepared using GAAP. The controller would like to see the effect of IFRS treatment of leases on the financial statements;

you have been assigned this task. In particular, the controller would like to know the impact GAAP and IFRS differences have on the balance sheet, income statement, cash flow statement, and selected financial ratios. The company would like to adopt IFRS by as early as next year as it is considering a new stock issue in the Tokyo Stock Exchange, which requires IFRS compliance.

Table 1: U.S. GAAP Balance Sheet for ACE Corp. at 12/31/2019 and 12/31/2018

Ace Corporation		
Balance Sheet (in 000 Except Par Value)		
as of December 31, 2019, and 2018		
ASSETS	2019	2018
Current Assets		
Cash	\$33,000	\$ 19,000
Accounts Receivable (net)	25,000	17,000
Inventory (FIFO)	<u>50,000</u>	<u>21,000</u>
Total Current Assets	108,000	57,000
Noncurrent Assets		
Security Available for Sale	\$ 10,000	0
Property, Plant, and Equipment	100,000	\$136,000
less Accumulated Depreciation	<u>(30,000)</u>	<u>(28,000)</u>
	80,000	108,000
Intangible Assets		
Trademark	5,000	7,000
Goodwill	<u>7,000</u>	<u>7,000</u>
Total Noncurrent Assets	<u>12,000</u>	<u>14,000</u>
Total Assets	<u>\$200,000</u>	<u>\$179,000</u>
Liabilities And Shareholders' Equity		
LIABILITIES		
Current liabilities		
Accounts payable	\$18,000	\$17,000
Accrued interest	2,000	2,000
Accrued operating expenses	13,000	19,000
Income taxes payable	<u>7,000</u>	<u>6,000</u>
Total current liabilities	40,000	44,000
Noncurrent Liabilities		
Deferred income taxes	\$ 5,000	\$ 4,000
Bonds Payable	<u>45,000</u>	<u>45,000</u>
Total noncurrent liabilities	<u>50,000</u>	<u>49,000</u>
Total Liabilities	90,000	93,000
SHAREHOLDERS' EQUITY		
Common stock (\$1 par)	20,000	18,000
Additional paid-in capital	30,000	17,000
Retained earnings	<u>60,000</u>	<u>51,000</u>
Total Shareholders' Equity	<u>110,000</u>	<u>86,000</u>
Total Liabilities and Shareholders' Equity	<u>\$200,000</u>	<u>\$179,000</u>

Table 1 shows the Balance Sheet of Ace Corporation for the years ended 12/31/19 and 12/31/18 presented under U.S. GAAP reporting. Note that the presentation is based on the order of liquidity-most liquid items followed by less liquid items.

Table 2: ACE Corp. U.S. GAAP Income Statement for the Year Ended December 31, 2019

Ace Corporation		
Income Statement (in 000, Except Per Share Data)		
for the Year Ended December 31, 2019		
Sales		\$270,000
Cost of goods sold		<u>(175,000)</u>
Gross profit		95,000
Selling and administrative expenses	\$ 31,000	
Amortization and depreciation expense	10,000	
Interest expense	<u>4,000</u>	<u>(45,000)</u>
Income before taxes		50,000
Income tax expense		<u>(15,000)</u>
Income before extraordinary item		35,000
Extraordinary loss from the hurricane (net of \$6,000 tax savings)		<u>(14,000)</u>
Net Income		<u>\$21,000</u>
Earnings per share:		
Earnings per share from continuing operations		\$1.75
Extraordinary loss per share		(0.70)
Earnings per share		<u>\$1.05</u>

Table 2 presents a statement of income for the year ended 12/31/19 prepared under U.S. GAAP reporting. Also included is the earnings per share amount, which is derived by taking net income and divided by the number of common shares outstanding.

Table 3: ACE Corp. U.S. GAAP Cash Flow Statement for the Year Ended December 31, 2019

Ace Corporation		
Cash Flow Statement (in 000)		
for the Year Ended December 31, 2019		
Cash from Operating Activities		
Net income		\$21,000
Adjustments for noncash items:		
Loss from hurricane	\$14,000	
Depreciation expense	8,000	
Amortization expense	2,000	
Increase in accounts receivable	(8,000)	
Increase in inventory	(29,000)	
Increase in accounts payable	1,000	
Change in accrued operating expenses	(6,000)	
Change in income taxes payable	7,000	
Increase in deferred income taxes	<u>1,000</u>	<u>(10,000)</u>
Net Cash from Operating Activities		11,000
Cash from Investing Activities		
Insurance proceeds	\$10,000	
Purchase securities available for sale	<u>(10,000)</u>	
Net Cash from Investing Activities		-0-
Cash from Financing Activities		
Issue common stock	\$15,000	
Pay dividends	(12,000)	
Net Cash from Financing activities		<u>3,000</u>
Net increase in cash		\$14,000
Cash December 31, 2018		<u>19,000</u>
Cash December 31, 2019		<u>\$33,000</u>
Additional supplemental disclosure:		
Cash paid for income taxes		\$7,000
Cash paid for interest		\$4,000

Table 3 presents the Statement of Cash Flows for Ace Corp. for the year ended 12/31/19 under U.S. GAAP. The cash flow presented is the indirect method. Alternatively, the Direct method-not presented here is also the other acceptable cash flow statement under both U.S. GAAP and IFRS. The Direct Method is illustrated in the solution for question 5C, where the Direct Method is presented in the solution under IFRS.

ADDITIONAL INFORMATION

1. ACE entered into a noncancelable lease on January 2, 2019, with the following terms:
 - A- ACE leased specialized machinery manufactured by the lessor, Bell Corp., which enables ACE to manufacture their electric cars in a much more efficient manner. This machinery did not have a resale market and was made specifically for ACE to meet its specifications.
 - B. The lease term is for 3 years, with an annual lease payment of \$10,000. Payment is due on December 31 of each year, with the first payment due on December 31, 2019. At the end of the lease term, ownership reverts to the lessor. There is no option for ACE to buy the equipment.
 - C. The lessee will pay all executor costs of \$1,500/year, which included in 2102 selling and administration expenses.
 - D. The estimated useful life of the lease is 49 months (4 1/12 years.)
 - E. The fair market value of the equipment is \$30,000 on January 1, 2019.
 - F. The implicit rate of Bell Corp. is 6 percent, and the lessee, ACE, knows this.
 - G. ACE's incremental borrowing rate is 7 percent.
 2. ACE Corporation did not sell any plant assets; however, plant assets with a cost of \$36,000 and accumulated depreciation of \$6,000 were destroyed in a hurricane. Insurance proceeds of \$10,000 were collected by the company.
 3. Two million shares of common stock were issued at the beginning of 2019.
 4. Securities available for sale were purchased on December 31, 2019.
 5. Cash dividends were paid during 2019.
 6. ACE's bonds payable have several covenants that involve net income and cash from operating activities. The controller is especially concerned that the IFRS treatment of leases does not violate those covenants. She is concerned that renegotiating the debt covenants will be costly to ACE.

QUESTIONS

1. Differentiate between an operating lease and a capital/ financing lease for financial reporting purposes.
2. Under GAAP, has this been treated as a capital lease/financing lease or an operating lease by ACE? Why?
3. Under GAAP ASC 842, should this lease be classified as operating or a financing lease? Why?
4. Under IFRS, should this lease be classified as an operating or a financing lease? Why?
5. Under revised IFRS 16, should this lease be classified as an operating or a financing lease? Why?
6. Describe the different reporting results between GAAP and IFRS and make the necessary adjusting entries to conform the financial statements to IFRS compliance for 2019.
7. In answering the following parts, keep in mind companies usually prefer to report higher net income and higher cash from operating activities (although accounting research has identified exceptions to this).
 - A. Prepare an income statement under IFRS for 2019.
 - B. Prepare balance sheet under IFRS on December 31, 2019.

C. Prepare a cash flow statement under IFRS for 2019.

8-Compute the following ratios for 2019, under both IFRS and GAAP reporting:

1. Current Ratio
2. Quick Ratio
3. Cash Ratio
4. Times Interest Earned
5. Debt to Capital Ratio
6. Debt to Shareholder Equity Ratio.

9. Comment on your findings in 8 above.

10. Which method (USGAAP or IFRS) produces a better financial position of the firm?

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TEACHING NOTES

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CASE DESCRIPTION

This case focuses on the revised GAAP and IFRS differences in the treatment of leases and the grounds for classification as an operating or capital lease under the revised ASC-842 and IFRS 16. It is designed to have students research GAAP and IFRS pronouncements. They must compare and contrast the differences in the treatment of leases under the two frameworks. It also requires students to prepare the adjusting entries for the conversion to IFRS. They will prepare IFRS statements and compute and compare financial ratios for both GAAP and IFRS statements. Finally, they will discuss the status of IFRS lease adoption and the impact of its adoption in the U.S. Since this case requires research into GAAP and IFRS pronouncements, it is most appropriate for students who have completed or are currently enrolled in intermediate financial accounting II. It can be used at the graduate or undergraduate levels in a variety of additional financial reporting courses including accounting theory, international accounting, and financial statement analysis, as well as an investment finance course.

CASE LEARNING OBJECTIVES

The case is designed to have students identify reporting issues and apply the U.S. and international authoritative accounting literature by researching the FASB Accounting Standards Codification and the International Financial Reporting Standards (IFRS).

The specific learning objectives are for the student to:

- a) Identify differences in GAAP and IFRS treatment of leases under the revised guidelines.
- b) Prepare adjusting entries to convert GAAP based financial statements to IFRS income statement and balance sheet.
- d) Prepare an IFRS income statement, cash flow statement, and balance sheet and
- e) Calculate several ratios to illustrate the impact adopting revised IFRS accounting for leases could have on them.

Suggested Teaching Approach

The case may be offered as an individual case study or as a group project. For more advanced accounting students, this case should be an individual project. It could weight 10-15 % of the final course grade. When offered as an individual project, students will need three to six hours to research and prepare the case solution. For less advanced students, the case may be offered as a collaborative group project that would enable students to demonstrate and develop team-working skills. The case presents an opportunity to discuss the status of IFRS implementation in the U.S. and the impact IFRS had on ACE Corp. The in-class review of the solution and case discussion can be completed as part of a 50-minute class. In grading the case write-ups, instructors should evaluate the identification of relevant issues, proper accounting for the

IFRS conversion and computation of the ratios including the computational accuracy of numbers, quality and depth of research as evidenced by appropriate citations of the literature. We suggest that the instructor explain the basis for grading at the outset.

Pointers for Classroom Discussion

After the review of the IFRS statements, the instructor may wish to discuss the impact of IFRS. Suggested questions to ask the class are: What impact will IFRS have on ACE Corp.'s income statement, cash flow statement, and balance sheet? What are the benefits of adopting IFRS? What are the disadvantages of IFRS?

You may wish to have students research the status of the FASB/IASB discussions on leases under the revised standards and its effect on off-balance sheet financing.

SUGGESTED SOLUTION

Question 1: Differentiate between an operating lease and a Capital/ Financing Lease for financial reporting purposes.

Solution 1: Operating lease payments are treated as rent expense and recorded on the income statement. An operating lease is an off-balance sheet transaction and is preferred by companies because it lowers liabilities, the debt ratio and does not result in “frontloading expenses” in the early years as does a capital lease. A GAAP capital lease is treated as a purchase of Property, Plant and Equipment and, therefore, capitalized on the Balance Sheet. Capital leases are termed “financing (or finance) leases” under IFRS. The present value of minimum lease payments required on the lease is recorded as a liability on the balance sheet. The discount rate is the lessee’s incremental borrowing or the implicit rate of the lease if it is lower and known by the lessee. The liability is separated into its current and long-term components, which affects the current ratio.

Pointers for Classroom Discussion

Discuss the differences between rules-based U.S. GAAP versus principles-based IFRS requirements for distinguishing between operating versus capital/financing leases.

Question 2: Under U.S. GAAP 840, is the lease treated as a capital lease/financing lease or an operating lease?

Solution 2: Under GAAP, if the lessee has a noncancelable lease and meets at least one of the four tests listed below, the lease is treated as a capital lease; otherwise, it is an operating lease.

Test 1: Transfer of Ownership Test: If at the end of the lease term, ownership transfers to the lessee, then this test is satisfied. Test 1 is not met in this case, as there is no transfer of ownership at the end of 2021.

Test 2: Bargain Purchase Option: If the lessee has the option to purchase the lease at a bargain purchase price, then this test is satisfied. In this case, there is no purchase option (bargain or not), so test 2 is not met.

Test 3: Economic Life Test: If the lease term is equal to or greater than 75% of the economic life of the asset, it is a capital lease. In this case, the lease term is 36 months divided by the economic life of 49 months, yields 73%; Test 3 is not met.

Test 4: Economic Recovery Test: If the present value of the minimum lease payments is 90 percent or greater of the fair market value of the asset, then it is a capital lease. In this case, the present value of the

minimum lease obligation is \$26,730 (see Table 3). The present value divided by the fair market value of the leased asset of \$30,000 is 89 percent; just shy of the 90% requirement. Test 4 is not met.

Since none of the four tests is met, the lease is treated as an operating lease to the ACE Corp. under U.S. GAAP. Note should be made that ACE just missed some of these tests by fractional amounts.

Table A: Minimum Lease Payments

Date	Payment	Interest (6%)	Principal	Liability Balance
Jan. 2, 2019				\$ 26,730
Dec. 31, 2019	\$ 10,000	\$ 1,604	\$ 8,396	18,334
Dec. 31, 2020	10,000	1,100	8,900	9,434
Dec. 31, 2021	<u>10,000</u>	<u>566</u>	<u>9,434</u>	0
Totals	<u>\$ 30,000</u>	<u>\$ 3,270</u>	<u>\$ 26,730</u>	N/A

Table A shows the interest and principle payments for each year of the lease. It also shows the liability at the end of each year. The interest expense is the beginning of the year lease obligation multiplied by the 6% interest rate.

Pointers for Classroom Discussion

Discuss why a corporation has an incentive for making a lease classification as operating rather than capital. The reasons, as discussed above are avoiding recording current and noncurrent liabilities and the frontloaded expenses in the early years; however, there is one positive aspect of a capital lease – under operating leases, the lease payment is classified as an operating cash payment which reduces cash from operating activities. As a capital lease, the interest paid for the lease payment is classified as an operating activity, but the principal reduction payment is categorized as financing. Treatment under IFRS of the cash payment on a finance lease is the same.

Question 3: Under revised U.S. GAAP ASC 842, should this lease be classified as an operating or a financing lease? Why?

Under ASC 842, all long-term (greater than one year) non-cancellable leases must be capitalized and reflected on the Balance Sheet as a Right-of-Use Asset and a lease liability. The right of use asset (ROU) is reflected as a separate part of the Property, Plant, and Equipment section of the Balance Sheet and is reduced by an Accumulated Amortization balance. These ROU leases are termed as either finance or operating leases and termed as Type A and Type B leases respectively. The difference in these leases lies in the income and cash flow statement treatment. In a Type A lease, the lease payment represents an interest and principal component. The expense will equal interest and amortization (previously called depreciation expense), and the cash flow will include operating cash payments for the interest and financing cash flow for the principal payment. The total expense will decrease every year by a declining outstanding principal/liability balance. Hence, a Type A lease is termed as an accelerated payment lease. In type B, operating lease, the lease payment is a rent expense amount in full and is a cash outflow from operating activities. The rent expense will be equal every year during the lease term, and as such is termed as a straight-line lease. The rent expense will equal the interest expense, plus amortization expense; which will be the difference of the annual lease expense less the interest expense.

ASC requires that type A and B leases, be reflected as a separate component of the Property, Plant and Equipment section of the Balance Sheet, with each type of lease be presented separately less accumulated amortization amount. On the liability side, Type A and B leases should be shown separately, in the current liabilities and long-term liabilities sections of the Balance Sheet.

For a lease of one year or less, short-term leases, the company has the option to either capitalize these leases or treat them as an off-balance sheet transaction whereby the rent payment will represent a rent expense.

Since the lease term is more than 12 months, the lease should be treated as financing lease as type A because the underlying asset is of such a specialized nature that it is expected to have no alternative use to the lessor at the end of the lease term. Alternatively, if the accounting policies of the firm suggest alternative treatment, then use Type B lease accounting treatment.

Note: The effect of lease effects on the operating lease (Type B) on the net profit is the same. The only difference is in the method followed (Accelerated and Straight-line method)

Question 4: Under IFRS, should this lease be classified as an operating lease or a financing lease?

Solution 4: Under IFRS, this lease is a financing/capital lease as the criteria of lease type is based on principles, and not rules. Under IFRS, if the lessee assumes the economic benefit and risks of the leased asset, and the facts of the situation are such that the lease resembles a financing lease, then it is treated as a financing lease. The fact that this machine is specialized in nature for ACE's use, and many of the tests under GAAP are nearly met are indicators of a finance lease rather than an operating lease. The lessor manufactured this equipment to ACE's specifications and in effect transferred the risk to ACE upon the inception of the lease. Further, ACE was able to circumvent the capital lease rules under GAAP by making estimates work to its advantage.

Question 5: Under revised IFRS 16, should this lease be classified as an operating or a financing lease? Why?

Solution 5: Under the revised IFRS 16, the distinction between operating and financing leases is eliminated for all lessees, and a new lease asset (representing the right to use the leased item for the lease term) and lease liability (representing the obligation to pay rentals) are recognized for all leases. All lessees should initially recognize the right-of-use asset and lease liability based on the discounted payments required under the lease. Under IFRS 16 lessees may elect not to recognize assets and liabilities for leases with a lease term of 12 months or less. In such cases, a lessee recognizes the lease payments in profit or loss on a straight-line basis over the lease term. To be able to apply for this exemption, entities need to determine the lease term. The determination of short-term lease is consistent with the definition of a lease term, i.e., the options to extend should be taken into account if an entity is reasonably certain to exercise an option to extend (or not to terminate) a lease. Any lease that contains a purchase option is not a short-term lease.

Since the lease term is more than 12 months, the lease should be classified as a financing lease. Moreover, the underlying asset is of such a specialized nature that it is expected to have no alternative use to the lessor at the end of the lease term. Treat this as a financing lease.

Note: The overall impact of lease payments of an operating lease (IFRS 17) on the net profit is the same, which is similar to GAAP ASC-842.

Question 6: Describe the different reporting results between GAAP and IFRS and make the necessary adjusting entries to conform the financial statements to IFRS compliance for 2019.

Solution 6: In each of the three years of the lease, both GAAP and IFRS treat the lease as a financing lease from the *lessee's point of view* as the lease term is more than 12 months and non-cancellable lease.

A: Year of lease Inception (2019):

Under IFRS, the financing/ capital lease is treated as a purchase of Right-of-use asset and capitalized on the balance sheet as such for \$26,730. Additionally, the minimum lease obligation is shown on the balance sheet as a liability of \$18,334 (\$26,730 less the year 1 payment of \$8,396). Of this amount, \$8,900 is classified as a current liability, and \$9,434 is classified as a long-term liability. On the income statement, depreciation expense is \$8,910 (26,730 divided by the lease term of 3 years), and interest expense is \$1,604, for a total of \$10,514.

B: Subsequent to Year of Inception - 2020 and 2021 of lease payments:

IFRS: The \$10,000 lease payment is treated as an interest expense as calculated above; \$1,100 in 2020 and \$566 in 2021 in addition to a depreciation expense of \$8,910. Over the 3 years, the total expense will be the same (\$30,000) under both methods of reporting (operating / capital/financing.)

ADJUSTING ENTRIES 2019 TO CONFORM TO IFRS

1. This is a summary journal entry that records the leased asset as a capital lease, records the current and noncurrent portions of the lease liability (as of December 31, 2019), and “reclassifies” the December 31, 2020 lease payment from rent expense to interest expense and a reduction of the lease liability.

Right-of-Use Asset	26,730	
Interest expense	1,604	
Lease obligation – current liability		8,900
Lease obligation – noncurrent liability		9,434
Selling and administrative expenses		10,000

2. This entry records the leased asset amortization expense for 2019 using straight-line amortization.

Amortization Expense	8,910	
Accumulated amortization		8,910

3. This entry reclassifies the extraordinary loss into the body of the income statement, see the discussion below (in 4) for a reason. The income tax effect of the loss is also discussed in 4, below.

Loss from Hurricane	20,000	
Extraordinary loss from hurricane		20,000

There is no prompt in the case for the reclassification in 3. Students must demonstrate critical thinking by identifying that IFRS does not allow for the use of an extraordinary item. It is essential to point out that we should not be so focused on one issue (lease treatment) that we overlook other issues that should be apparent.

3a. Entry 3 assume that ACE made the following entries during 2019 when the loss, insurance recovery, and related tax savings were recorded:

Cash	10,000	
Accumulated depreciation	6,000	
Extraordinary loss from hurricane	20,000	
Property, plant, and equipment		36,000
Income tax payable	6,000	
Tax savings from hurricane loss		6,000

The tax savings were netted against the extraordinary loss on the U.S. GAAP.

4. This entry reclassifies taxes saved from the hurricane loss (which GAAP netted with the extraordinary loss, but IFRS would include with income tax expense); the entry also records the deferred tax effect of switching to IFRS for public reporting purposes, but not switching for income tax purposes.

Tax Savings from Hurricane Loss	6,000	
Deferred income taxes	154	
Income tax expense		6,154

Adjusting entry four assumes ACE made the following summary entry to record income taxes in 2019:

Income Tax Expense	15,000	
Deferred income taxes	1,000	
Tax savings from hurricane loss	6,000 (netted against the hurricane loss)	
Income taxes payable	1,000	
Cash	7,000	

It also assumes that ACE would continue to report the lease as an operating lease for income tax purposes, therefore the tax ACE owed for 2019 would not change, There would be a reduction of deferred income taxes for the tax rate times the difference between the expenses reported under a financing lease (amortization expense plus interest expense) and the rent expense reported under an operating lease. [30% * (8,910+1,604)-10,000].

Pointers for Classroom Discussion

Show that under capital/financing lease treatment, the expense plus depreciation plus interest will be more than the operating lease, but the impact on net profit is similar under each of the methods. In the entire term of the lease, each method will yield identical expense totals. Use of the amortization schedule will illustrate this clearly.

Question 7A: Prepare an Income Statement under IFRS for 2019. Assume that the net income remains the same under IFRS as it does for GAAP and any difference is reconciled in the tax expense and tax payable accounts.

Solution 7A: See Table B

Table B: ACE Corp. IFRS Income Statement for the Year Ended December 31, 2019

Ace Corporation		
Income Statement (in 000, Except per Share Data)		
for the Year Ended December 31, 2019		
Sales		\$270,000
Cost of goods sold		(175,000)
Gross profit		95,000
Selling and administrative expenses	$\$31,000 - 10,000(1) = 21,000$	
Amortization and depreciation expense	$10,000 + 8,910 (2) = 18,910$	
Interest expense	$4,000 + 1,604 (1) = 5,604$	
Loss from hurricane	(3) 20,000	(65,514)
Income before taxes		29,486
Income tax expenses	$15,000 - 6,154 (4) =$	(8,846)
Net Income		\$ 20,640
Earnings per share:		\$1.03

Table B shows the impact on the income statement of the conversion to IFRS. The numbers in parenthesis refer to the adjusting entry made to record the conversion to IFRS.

Question 7B: Prepare a Balance Sheet under IFRS for 2019.
Solution 7B: See Table C

Table C: ACE Corp. IFRS Balance Sheet as of December 31, 2019

Ace Corporation Balance Sheet (in 000 Except par Value) Using IFRS as of December 31, 2019, and 2018		
	2019	2018
ASSETS		
Intangible Assets		
Trademark	\$5,000	\$7,000
Goodwill	<u>7,000</u>	<u>7,000</u>
Total Intangible Assets	12,000	\$14,000
Noncurrent Assets		
Property, Plant and Equipment ¹	\$126,730	
less Accumulated Depreciation & Amortization ²	<u>(38,910)</u>	136,000
	87,820	<u>(28,000)</u>
Security Available for Sale	<u>10,000</u>	0
Total Noncurrent Assets	97,820	108,000
Current Assets		
Inventory (FIFO)	50,000	21,000
Accounts Receivable (net)	25,000	17,000
Cash	33,000	<u>19,000</u>
Total Current Assets	<u>108,000</u>	<u>57,000</u>
Total Assets	<u>\$217,820</u>	<u>\$179,000</u>
Liabilities And Shareholders' Equity		
EQUITY		
Share capital	\$20,000	\$18,000
Share premium	30,000	17,000
Retained earnings *	59,640	<u>51,000</u>
Total Shareholders' Equity	<u>\$109,640</u>	\$86,000
LIABILITIES		
Noncurrent Liabilities		
Lease obligation – noncurrent liability ³	9,434	0
Deferred income taxes ⁴	4,846	4,000
Bonds Payable	45,000	<u>45,000</u>
Total noncurrent liabilities	<u>59,280</u>	49,000
Current liabilities		
Accounts payable	18,000	17,000
Accrued interest	2,000	2,000
Accrued operating expenses	13,000	19,000
Income taxes payable	7,000	6,000
Lease obligation – current liability ⁵	<u>8,900</u>	0
Total current liabilities	<u>48,900</u>	<u>44,000</u>
Total Liabilities	<u>90,000</u>	<u>93,000</u>
Total Liabilities and Shareholders' Equity	<u>\$217,820</u>	<u>\$179,000</u>

Table C shows the IFRS Balance Sheet after conversion. Where adjustments were necessary, they are indicated next to the account. Note that IFRS recommends listing accounts in reverse order of liquidity. The common stock is shown as share capital and additional paid-in capital as share premium.

¹ $100,000 + 26,730 (1) = 126,730$ * Retained earnings Dec. 31, 2018 \$51,000

² $30,000 + 8,910 (2) = (38,910)$ IFRS net income 20,640

³ (1) \$9,434 Dividends declared -12,000

⁴ $\$5,000 - 154 (4) = 4,846$ Retained earnings Dec. 31, 2019 \$59,640

⁵ $8,900 (1) 8,900$

The numbers in parenthesis refer to the adjusting entry made to record the conversion to IFRS

Table D: ACE Corp. IFRS Cash Flow Statement as of December 31, 2019

Ace Corporation	
Cash Flow Statement (in 000) Using IFRS	
for the Year Ended December 31, 2019	
Cash from Operating Activities	
Cash collected from customers ¹	262,000
Cash paid for inventory ²	(203,000)
Cash paid for selling and administrative costs ³	(27,000)
Cash paid for income taxes ⁴	<u>(7,000)</u>
Net Cash from Operating Activities	25,000
Cash from Investing Activities	
Insurance proceeds ⁵	\$10,000
Purchase securities available for sale ⁶	<u>(10,000)</u>
Net Cash from Investing Activities	-0--
Cash from Financing Activities	
Issue common stock ⁷	15,000
Cash paid for interest ⁸	(5,604)
Payment on financing lease ⁹	(8,396)
Pay dividends	<u>(12,000)</u>
Net Cash from Financing activities	<u>(2,604)</u>
The net increase in cash	\$14,000
Cash December 31, 2018	<u>19,000</u>
Cash December 31, 2019	<u>\$33,000</u>

Noncash investing and financing activity: Ace recorded a \$26,730 finance leased asset. (This could also be disclosed in the notes to the financial statements.)

¹ Sales	\$270,000	² Cost of goods sold	\$(175,000)
Increase in acct. Rec.	<u>(8,000)</u>	Increase in inventory	(29,000)
	<u>\$262,000</u>	Increase in acct. pay.	<u>+ 1,000</u>
			<u>\$(203,000)</u>
³ Selling & admin. exp.	\$(21,000)	⁴ Income tax expense	\$(8,846)
Dec. in accrued oper. exp.	<u>(6,000)</u>	Increase in income tax payable	1,000
	<u>\$(27,000)</u>	Increase in deferred tax liability	<u>846</u>
			<u>\$(7,000)</u>
⁵ Given in case		⁶ Given in case	
⁷ Change in common stock (share premium)	\$ 2,000	⁸ Interest expense	\$(5,604)
Change in APIC (share premium)	<u>13,000</u>	Change in interest payable	<u>0</u>
			<u>\$(5,604)</u>

Question 8: Ratio Calculations on December 31, 2019

Solution 8: See Table E

Table E: Ratio Calculations

	GAAP & IFRS
Current Ratio=current assets/current liabilities	2.21
\$108,000/\$40,000	\$108,000/\$48,900
Quick Ratio=current assets-inventory/current liabilities	1.19
(108,000-50000)/40,000	(108,000 – 50,000)/48,900
Cash Ratio=cash/current liabilities	0.67
33,000/40,000	33,000/48,900
Times Interest Earned =EBIT/ Interest Expense	8.83
34,000/4,000	49,486/5,604
Debt to Capital Ratio=Total Liabilities/Total Assets	0.50
90,000/200,000	108,180/217,820
Debt to Shareholder Equity Ratio=Liabilities/Shareholder' Equity	0.99
90,000/110,000	108,180/109,640

Financial ratios: The ratios presented above show similar effects of using U.S. GAAP versus IFRS. Solution 9 resented below, provides an overview conclusion of the impact of using U.S. GAAP versus IFRS and the resulting financial consequences on these key 6 ratios.

Question 9: Comments

Solution 9: From the lessee's point of view, the ratios indicate that both GAAP and IFRS rules result in more conservative ratio results. The revised lease standards (ASC 842 and IFRS 16) show similar results suggesting that GAAP and IFRS similarly treat the long-term leases and they will have far more significant negative implications on bond covenant agreements as well as other long and short-term creditor legally binding contracts. Thus the new leasing standard may compel more organizations to reassess their strategy ‘lease vs. buy’ decisions, which also indirectly affect lessor IFRS 17.

Question 10 Which method (USGAAP or IFRS) produces a better financial position of the firm?

Solution: The students need to specify the differences between IFRS and USGAAP rules for leases. The students need to set the parameters for lease option under USGAAP. The students need to justify the selection of Type A and B lease. If type A lease is selected their USGAAP financial statements more or less concur with IFRS statements and the financial position may be more or less similar to each other. However, if the students exercise type B lease, their USGAAP statements will differ from IFRS, and they may find that financial position is better under USGAAP. Students should highlight the changes in the operating cash flow under the two standards under type B lease treatment.

CONCLUSION

The new lease standards under USGAAP and IFRS bridges the gap between the two standards and eliminate the dangers of off-balance sheet financing to a certain extent. The IFRS is the future of worldwide financial reporting and should be included as a significant part of any accounting and business curriculum in the U.S., as well as the rest of the world. The revised standards affect virtually ratios and financial performance metrics such as gearing, current ratio, asset turnover, EBITDA, operating profit, net income, and operating cash flows. This case illustrates a situation where students use a Balance Sheet, and Income Statement is prepared using GAAP as a basis and convert to IFRS for comparison purposes, from the creditor point of view. In this case study, revised IFRS rules are discussed, and critical lease GAAP and IFRS accounting similarities and differences are addressed and the implications on the corporation’s creditors.

BIOGRAPHY

Dr. Umapathy Ananthanarayanan is an active researcher and previously worked at New York Institute of Technology as an assistant professor of accounting and as a lecturer in AUT University, New Zealand. He has published articles in Auditing: Journal of Theory and Practice, International Journal of Business and Finance Research, Accounting and Taxation and Review of Business and Finance studies.

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